

# ABSTRACT OF JP 56159300

L11 ANSWER 2 OF 7 CA COPYRIGHT 2002 ACS  
 AN 96:124985 CA  
 TI Manufacture of granular **detergents**  
 PA Hashimura, Takashige, Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC C11D011-00  
 CC 46-5 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	JP 60023159	B4	19850606		

AB The manuf. of granular **detergents without heating** involves **mixing** of Na<sub>2</sub>CO<sub>3</sub>-contg. additives with a **nonionic** (.gtoreq.50%)-**anionic surfactant mixt.** in an upright cylindrical granulator equipped with a stirrer having a flat upper blade and an upward-curving lower blade. For example,  
 a granular **detergent** was prepd. by **mixing** a **mixt.** of lauric diethanolamide **nonionic surfactant** 500, lauryl **sulfate anionic surfactant** 600, and H<sub>2</sub>O 300 g with a **mixt.** of Na<sub>2</sub>CO<sub>3</sub> 3500, fatty acid soap 1000, Na **silicate** 500, and CM-cellulose and others 100 g for 2 min.

ST granular **detergent** manuf

IT Surfactants

(anionic, in granular **detergent** manuf.)

IT **Detergents**

(granular, manuf. of, sodium carbonate-contg. additives and surfactants  
 in)

IT Surfactants

(nonionic, in granular **detergent** manuf.)

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